

### AMENDMENTS TO THE CLAIMS

1. **(Currently amended)** A method for the preparation of virus-inactivated thrombin comprising the steps of:

- (a) solvent-detergent virus ~~inactivation~~ inactivating of a solution comprising prothrombin and factor X;
- (b) loading the product of step (a) onto an anion exchange medium;
- (c) washing the anion exchange medium to remove the reagents used for the solvent-detergent virus ~~inactivation~~ inactivating in step (a); and
- (d) activating the prothrombin on the anion exchange medium to form thrombin by the addition of metal ions.

2. **(Currently amended)** A The method according to claim 1, wherein the solution comprising prothrombin and factor X is a prothrombin complex.

3. **(Currently amended)** A method for the preparation of virus-inactivated thrombin comprising the steps of:

- (a) solvent-detergent virus ~~inactivation~~ inactivating of a solution comprising factor X;
- (b) loading the product of step (a) onto an anion exchange medium;
- (c) washing the anion exchange medium to remove the reagents used for the solvent-detergent virus ~~inactivation~~ inactivating in step (a);
- (d) activating the factor X on the anion exchange medium to form factor Xa by the addition of metal ions; and
- (e) loading virus-inactivated prothrombin onto the anion exchange medium such that thrombin is generated.

4. **(Currently amended)** A The method according to ~~any one of claims~~ claim 1 to or 3 wherein the metal ions are divalent metal ions. .

5. **(Currently amended)** A The method according to claim 4 wherein the divalent metal ions are magnesium and/or calcium ions.

6. **(Currently amended)** A The method according to ~~any one of claim 1 to 5~~, further comprising the step of

- (e) selectively eluting the thrombin from the anion exchange medium.

7. **(Currently amended)** A The method according to claim 6, further comprising the steps of

- (f) passing the product of step (e) through a filter which retains pathogens;
- (g) adding a divalent metal ion and a carbohydrate to the product of step (f), and
- (h) freeze-drying and heat-treating the product of step (g) to inactivate viruses.

8. **(Currently amended)** A The method according to ~~any one of claims 1 or 3 to 7~~, wherein steps (a) and (b) are replaced by steps (a') and (b'):

(a') loading a solution comprising prothrombin and factor X onto an anion exchange medium; and

(b') solvent-detergent virus ~~inactivation~~ inactivating of the prothrombin and factor X on the anion exchange medium.

9. **(Currently amended)** Thrombin prepared according to the method of ~~any one of claims 1 or 3 to 8~~.

10. **Canceled**

11. **(Currently amended)** A pharmaceutical formulation comprising thrombin prepared according to the method of ~~any one of claims 1 or 3 to 8~~.

12. **(Currently amended)** A pharmaceutical kit comprising thrombin prepared according to the method of ~~any one of claims 1 or 3 to 8~~, together with fibrinogen.

13. **(Currently amended)** A The kit as claimed in claim 12 wherein the fibrinogen is prepared by a method comprising the steps of:

(a) loading a solution comprising fibrinogen onto an immobilised metal ion affinity chromatography matrix under conditions such that the fibrinogen binds to the matrix, and

(b) selectively eluting the fibrinogen from the matrix.

14. **(New)** The method according to claim 3, further comprising the step of

(f) selectively eluting the thrombin from the anion exchange medium.

15. **(New)** The method according to claim 14, further comprising the steps of

- (g) passing the product of step (f) through a filter which retains pathogens;
- (h) adding a divalent metal ion and a carbohydrate to the product of step (g), and
- (i) freeze-drying and heat-treating the product of step (h) to inactivate viruses.